

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for automating processing of scan data files generated by a digital image scanner, comprising:

selecting, at the scanner, a specific scan job type from a list of pre-defined scan job types, each scan job type having pre-specified properties;

scanning one or more documents according to properties of said specific scan job type, thereby generating a file of scan data;

automatically synthesizing ~~[[a]]~~ the scan data file including the scan data generated during the scanning step and meta data relating to properties of said specific scan job type, said metadata also including data ~~for controlling an operation of~~ for selecting a certain further processing of the scan data in an image server and data for directing said selected further processing of the scan data;

transmitting the scan data file to the image server;

automatically analysing, upon reception of the scan data file in the image server, the scan data file as to the data contained therein; and

automatically further processing the scan data file in the image server in a way specified by said meta data contained therein.

2. (Original) The method according to claim 1, further comprising:

pre-defining a scan job type, including specifying properties for said scan job type;

transmitting a scan job type definition thus made to the scanner; and

upon reception of a scan job type definition at the scanner, including said scan job type definition in the list of scan job types.

3. (Original) The method according to claim 2, further comprising:

transmitting said scan job type definition to the image server and installing said scan job type therein, for reference when a scan data file is analysed.

4. (Original) The method according to claim 1, wherein

said meta data contained in a synthesized scan data file includes an application selector string which specifies said way of further processing of that scan data file.

5. (Original) The method according to claim 1, further comprising:
automatically synthesizing a file name for a scan data file, said file name including at least part of said meta data.

6. (Original) The method according to claim 1, wherein said further processing includes displaying said scan data file on a display screen.

7. (Original) The method according to claim 1, wherein said further processing includes storing said scan data file in a specified database.

8. (Original) The method according to claim 1, wherein said further processing includes submitting said scan data file to a printer for printing.

9. (Original) The method according to claim 1, wherein,
in said scanning step, scan data are generated according to specifications specified by the properties of the selected scan job type.

10. (Original) The method according to claim 1, wherein
said properties of a scan job type include the requirement of a job number being given for a scan job, and wherein,
before a scan job of said type is started, an operator is asked to enter a job number for that job, and said job number is automatically included in said meta data contained in the scan data file generated.

11. (Currently Amended) A method for use in a networked scanner device, in which documents are scanned thereby generating scan data and in which generated scan data are uploaded to a server via a network, said method comprising:

scanning a document to generate scan data; and

automatically generating a composite scan data file that includes the generated scan data and composite meta data comprising an application selector code which ~~specifies~~ selects a certain further processing ~~step of the scan data~~ in said server ~~for further processing the scan data and comprising additional data for directing said selected~~ further processing of the scan data.

12. (Original) The method according to claim 11, also comprising:

automatically generating a file name for said scan data file, said file name including at least part of said composite meta data.

13. (Original) The method according to claim 11, further comprising:

storing generic composite meta data including an application selector code;

completing, by an operator, said generic composite meta data by entering additional identification data;

forming specific composite meta data based on said generic composite meta data and said additional identification data entered by the operator; and
scanning a document thereby generating a scan data file including said specific composite meta data.

14. (Original) The method according to claim 11, further comprising:

storing at least two different sequences of generic composite meta data, each relating to a respective scan job type and including a different application selector code;

presenting for selection said respective scan job types to an operator of the scanner

device;

selection, by the operator, of one of said scan job types; and

scanning a document thereby generating a scan data file including a specific sequence of composite meta data based on the generic sequence of composite meta data of a scan job type selected by the operator.

15. (Original) The method according to claim 14, further comprising

receiving identity information of an operator;

wherein, in the storing step, sets of at least one scan job type for each of a plurality of users are stored, and wherein, upon receiving said identity information of said operator, the set of scan job types of that operator is presented in the presenting step.

16. (Original) The method according to claim 14, wherein:

said identity information of an operator is inputted at the scanner device, and only said set of scan job types of that operator is presented.

17. (Original) The method according to claim 14, wherein:

said identity information of an operator is inputted at a remote site connected to the scanner, and

said set of scan job types of that operator is presented at the scanner device for a predetermined time interval.

18. (Original) The method according to claim 15, further comprising:

defining, at a remote site, a scan job type having a sequence of generic composite meta data including an application selector code and possibly data fields to be completed by an operator; and

downloading said defined scan job type and the related sequence of generic composite meta data to the scanner device for use in said device.

19.(Currently Amended) An apparatus for use in a networked scanner device, in which documents are scanned thereby generating scan data and in which generated scan data are uploaded to a server via a network, said apparatus comprising:

a scan data generator to generate scan data for a document; and

a unit to automatically generate a composite scan data file including the generated scan data and meta data including an application selector code ~~which~~ and additional directing data, together specifying a further processing ~~step~~ of the scan data in said server ~~for further processing the scan file.~~

20. (Original) The apparatus according to claim 19, further comprising:

a unit to store generic composite meta data, including an application selector code;

a unit to enter, by the operator, additional identification data to complete said generic composite meta data;

a unit to form a specific composite scan data file based on said generic composite meta data and said additional identification data entered by the operator; and

a unit to scan a document thereby generating a scan data file including said specific composite meta data.

21. (Original) The apparatus according to claim 19, further comprising:

a unit to store at least two different sequences of generic composite meta data, each relating to a respective scan job type and including a different application selector code;

a unit to present for selection said respective scan job types to an operator of the scanner device;

a unit to select, by the operator, of one of said scan job types; and

a unit to scan a document thereby generating a scan data file including specific composite meta data based on the generic composite meta data of the scan job type selected by the operator.

22. (Original) The apparatus according to claim 21, further comprising:
a unit for receiving identity information of an operator, and
wherein
said unit to store generic composite meta data stores sets of at least one scan job type for each of a plurality of users, and wherein
said unit to present scan job types for selection is connected to said unit for receiving identity information of an operator so as to present, upon receiving said identity information of an operator, the set of scan job types of that operator.

23. (Original) The apparatus according to claim 22, wherein
said unit for receiving identity information of an operator is operable to input identity information of an operator at the scanner device, and
said unit to present scan job types for selection is operable to present the set of scan job types of that operator only.

24. (Original) The apparatus according to claim 22, wherein
said unit for receiving identity information of an operator is connected to a remote site for inputting identity information of an operator, and
said unit to present generic composite scan file names for selection is operable to present the set of scan job types of that operator at the scanner device for a predetermined time interval.

25. (Original) The apparatus according to claim 21, further comprising:
a unit to define, at a remote site, a scan job type including a sequence of generic composite meta data including an application selector code and possibly data fields to be completed by an operator; and
a unit to download said defined scan job type including said sequence of generic composite meta data to the scanner device for use in said device.

26.(Currently Amended) A data structure for use in a memory of a networked scanner device, in which documents are scanned thereby generating a scan file and in which a generated scan file is uploaded to a server via a network, said scan file including said data structure comprising:

an image data object to specify image contents of one or more scanned documents of said scan file; and

a meta data object, linked to the image data object, to identify composite meta data at least including an application selector code which ~~specifies~~ selects a certain further processing ~~step of the scan file~~ in said server ~~for further processing the scan file~~ and additional data for directing said selected further processing of the scan file.

27. (Original) The data structure according to claim 26, further comprising:

an extra data object, linked to one of said image data object and said meta data object, to specify additional identification data of the scan file.

28.(Currently Amended) A generic data structure for use in a memory of networked scanner device, in which documents are scanned thereby generating a scan file and in which a generated scan file is uploaded to a server via a network, said scan file in said memory including said data structure comprising:

a first section for accommodating image data specifying image contents of one or more scanned documents; and

a second section, linked to said first section, for accommodating composite meta data at least including a predefined application selector code which ~~specifies~~ selects a certain further processing ~~step of the scan file~~ in said server ~~for further processing the scan file~~ and further including operator-completable additional identification data for directing said selected further processing of the scan file.

29. (Currently Amended) An article of manufacture comprising a computer readable medium having embedded thereon a computer program to be processed by a computer that is

connected, via a network, to a scanner device for scanning documents thereby generating a scan data file and for uploading ~~[[a]]~~ the generated scan data file to a server via said network, said computer-readable-medium-embodied program comprising:

a first segment to define generic composite meta data including an application selector code field and an additional data field for directing data, said fields together specifying a further processing of the generated scan data file; and

a second segment to ~~download-upload~~ said defined generic composite meta data to the scanner device for use in said device.

30. (Currently Amended) The article of manufacture according to claim 29, wherein said first segment is also operable to define said generic composite meta data so as to include at least one data field to be completed to enter said additional directing data by an operator at the scanner device.

31. (New) The method according to claim 1, further comprising:

before starting a scan job in the scanning step according to a selected scan job type to generate the scan data of the scan data file, asking an operator at a local scanner user interface to enter said data for directing said selected further processing of the scan data; and

including said operator-entered data in the metadata of the scan data file.